

CAPITAL IMPROVEMENT PROGRAM

Makawao - Pukalani - Kula

DOLLARS IN THOUSANDS	FY 2004
<u>Government Facilities</u>	
Eddie Tam Gym Improvements	350 B
<u>Road Improvements</u>	
Makawao/Pukalani/Kula District Resurfacing	200 C
<i>Ukiu Road Safety & Drainage Improvements</i>	150 C
<u>Parks and Recreation</u>	
Pukalani Jogging Paths, Phase II	20 P
<u>Water</u>	
Alae Tank Replacement	1,000 C
Chlorination Retrofit - Kamole Tank	35 C
<i>Kamaole Lateral Waterline Improvements (Easy Street)</i>	55 C
<i>Kamaole WWTP Improvements - Clearwell Replacement</i>	300 C
<i>Kamaole WWTP Improvements - Traveling Screen Replacement</i>	180 C
Kamole WTP Improvements - Acid Cleaning Systems	165 C
Kamole WTP Improvements - Replacement Caustic Tank in Chemical Building	25 C
<i>Keokea Waterline Improvements - Middle Road</i>	840 C
Kula Ag Park - Additional Pumps	55 C
Lower Kula Reservoir	1,500 C
<i>Lower Olinda Waterline Improvements</i>	800 C
Pulehuike Tank Replacement	150 C
<i>Replacement of Kamole #4 Pump</i>	70 C
Replacement of Kula Ag Park Booster Pump #587	60 C
Replacement of Maluhia Pump #533	60 C
Upcountry Source Development	900 C
Waikamoi Flume Repairs and Maintenance	50 C

Fund Source: C = County B = G.O. Bonds F = Federal S = State X = Other L = Lapsed Bond Proceeds P = Park Assessment

CAPITAL IMPROVEMENT PROGRAM

Makawao - Pukalani - Kula

DOLLARS IN THOUSANDS	FY 2004
<u>Water</u> - cont'd.	
	6,595 C
	350 B
	0 F
	0 S
	0 X
	0 L
	20 P
	<hr/>
TOTAL MAKAWAO - PUKALANI - KULA DISTRICT	6,965

Fund Source: C = County B = G.O. Bonds F = Federal S = State X = Other L = Lapsed Bond Proceeds P = Park Assessment

CAPITAL IMPROVEMENT PROGRAM

Makawao Baseyard Improvements

DISTRICT: Makawao - Pukalani - Kula
PROJECT TYPE: Government Facilities
DEPARTMENT: Public Works & Environmental Management

DESCRIPTION AND JUSTIFICATION:

Design and construct truck storage building(s) and new office. Truck storage buildings are needed to house trucks and equipment from inclement weather. Inclement weather causes accelerated corrosion and reduced service life of our expensive truck and equipment fleet. A new office is needed as the existing wooden office is slowly collapsing. Structures will be built to be hurricane resistant as the staff will need to be operational during the storms. One of the truck storage buildings will have a second story lunch room/conference room and storage space.

OPERATING IMPACT:

Truck storage buildings will protect our investment in expensive trucks and equipment by extending service life. Currently trucks and equipment is left out in the open and they suffer from corrosion from salt breeze and rain water causing rust. The existing office floor tilts in different locations depending upon where you try to sit. Attempts to repair the building have not been successful. Wood rot caused by the humid weather in Makawao is also a problem. The office was not designed for high technology equipment we now employ (i.e. computers, facsimile machines, copy machines, etc.) nor was it designed to withstand hurricane type forces. A new office structure should address all these shortfalls.

ANTICIPATED LIFE: 25 years

Dollars in Thousands

Expenditure Type	Prior Appropriation	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	TOTAL
Land Acquisition								
Design			150 C					150 C
Construction			3,000 C					3,000 C
Other (Specify)								
Total Cost		0	3,150 C					3,150 C

Fund Source: C = County B = G.O. Bonds F = Federal S = State X = Other L = Lapsed Bond Proceeds P = Park Assessment

CAPITAL IMPROVEMENT PROGRAM

New Makawao District Police Station

DISTRICT: Makawao - Pukalani - Kula
PROJECT TYPE: Government Facilities
DEPARTMENT: Police

DESCRIPTION AND JUSTIFICATION:

Decentralization of upcountry Maui Police operations to a district station in the Makawao/Pukalani area will increase effectiveness and provide the residents with an enhanced police presence.

OPERATING IMPACT:

Additional maintenance and utilities.

ANTICIPATED LIFE: 20 years

Dollars in Thousands

Expenditure Type	Prior Appropriation	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	TOTAL
Land Acquisition								
Design						50 B	450 B	0 500 B
Construction								0
Other (Specify)								
Total Cost		0				50 B	450 B	0 500 B

Fund Source: C = County B = G.O. Bonds F = Federal S = State X = Other L = Lapsed Bond Proceeds P = Park Assessment

Eddie Tam Gym Improvements

DISTRICT: Makawao - Pukalani - Kula
PROJECT TYPE: Parks
DEPARTMENT: Parks and Recreation

DESCRIPTION AND JUSTIFICATION:

The project includes the following: gym shower repairs; social hall kitchen and ceiling repairs; replace roof soffit enclosure; gym ceiling repair and new lighting; painting of entire interior and exterior; replace parking lot lights and resurfacing of the police parking area.

OPERATING IMPACT:

None

ANTICIPATED LIFE: 20 years

Dollars in Thousands

Expenditure Type	Prior Appropriation	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	TOTAL
Land Acquisition								
Design								
Construction		350 B						350 B
Other (Specify)								
Total Cost		350 B						350 B

Fund Source: C = County B = G.O. Bonds F = Federal S = State X = Other L = Lapsed Bond Proceeds P = Park Assessment

Makawao/Pukalani/Kula District Resurfacing

DISTRICT: Makawao - Pukalani - Kula
PROJECT TYPE: Road Improvements
DEPARTMENT: Public Works & Environmental Management

DESCRIPTION AND JUSTIFICATION:

District resurfacing. Resurfacing will reduce annual maintenance costs and improve overall road safety.

OPERATING IMPACT:

No impact on staffing or operating budget anticipated.

ANTICIPATED LIFE: 10 years

Dollars in Thousands

Expenditure Type	Prior Appropriation	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	TOTAL
Land Acquisition								
Design								
Construction	400 C	200 C	200 C	200 C	200 C	200 C	200 C	1,600 C
Other (Specify)								
Total Cost	400 C	200 C	200 C	200 C	200 C	200 C	200 C	1,600 C

Fund Source: C = County B = G.O. Bonds F = Federal S = State X = Other L = Lapsed Bond Proceeds P = Park Assessment

CAPITAL IMPROVEMENT PROGRAM

Ukiu Road Safety & Drainage Improvements

DISTRICT: *Makawao-Pukalani-Kula*
 PROJECT TYPE: *Road Improvements*
 DEPARTMENT: *Public Works & Environmental Management*

DESCRIPTION AND JUSTIFICATION:
(Project added by B&F Committee. Not included in original Mayor Budget Proposal.)

OPERATING IMPACT:

ANTICIPATED LIFE:

Dollars in Thousands

Expenditure Type	Prior Appropriation	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	TOTAL
Land Acquisition								
Design								
Construction		150 C						150 C
Other (Specify)								
Total Cost		150 C						150 C

Fund Source: C = County B = G.O. Bonds F = Federal S = State X = Other L = Lapsed Bond Proceeds P = Park Assessment

Kula Tennis Courts

DISTRICT: Makawao - Pukalani - Kula
PROJECT TYPE: Parks
DEPARTMENT: Parks and Recreation

DESCRIPTION AND JUSTIFICATION:

Construction of two additional tennis courts with lights. Master and construction plans have been completed. Cost of the project includes re-alignment of internal access roadway, excavation and construction of retaining wall.

OPERATING IMPACT:

Additional electricity.

ANTICIPATED LIFE: 20 years

Dollars in Thousands

Expenditure Type	Prior Appropriation	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	TOTAL
Land Acquisition								
Design	50 C							50 C
Construction			650 B					650 B
Other (Specify)								
Total Cost	50 C		650 B					50 C 650 B

Fund Source: C = County B = G.O. Bonds F = Federal S = State X = Other L = Lapsed Bond Proceeds P = Park Assessment

CAPITAL IMPROVEMENT PROGRAM

Lower Kula Road Improvements

DISTRICT: Makawao - Pukalani - Kula
PROJECT TYPE: Road Improvements
DEPARTMENT: Public Works & Environmental Management

DESCRIPTION AND JUSTIFICATION:

Road improvements to install sidewalks, road resurfacing and pavement striping on Lower Kula Road from Copp Road to Haleakala Waldorf School.

OPERATING IMPACT:

No impact on staffing or operating budget anticipated.

ANTICIPATED LIFE: 20 years

Dollars in Thousands

Expenditure Type	Prior Appropriation	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	TOTAL
Land Acquisition								
Design								
Construction			800 C					800 C
Other (Specify)								
Total Cost			800 C					800 C

Fund Source: C = County B = G.O. Bonds F = Federal S = State X = Other L = Lapsed Bond Proceeds P = Park Assessment

Pukalani Jogging Paths, Phase II

DISTRICT: Makawao - Pukalani - Kula
PROJECT TYPE: Parks
DEPARTMENT: Parks and Recreation

DESCRIPTION AND JUSTIFICATION:

The project includes the design and construction of additional asphalt jogging paths around the upper fields. A contract has been awarded for the construction of jogging paths for the lower fields.

OPERATING IMPACT:

None

ANTICIPATED LIFE: 20 years

Dollars in Thousands

Expenditure Type	Prior Appropriation	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	TOTAL
Land Acquisition								
Design	17 C							17 C
		20 P						20 P
Construction	113 C		100 B					113 C 100 B
Other (Specify)								
Total Cost	130 C		100 B					130 C 100 B 20 P
		20 P						

Fund Source: C = County B = G.O. Bonds F = Federal S = State X = Other L = Lapsed Bond Proceeds P = Park Assessment

CAPITAL IMPROVEMENT PROGRAM

Pulehu Road Improvements

DISTRICT: Makawao-Pukalani-Kula
PROJECT TYPE: Road Improvements
DEPARTMENT: Public Works & Environmental Management

DESCRIPTION AND JUSTIFICATION:

Improvements consist of road widening, striping, resurfacing and some drainage features. Roadway improvements needed to upgrade substandard roadway system.

OPERATING IMPACT:

No impact on staffing or operating budget anticipated.

ANTICIPATED LIFE: 20 years

Dollars in Thousands

Expenditure Type	Prior Appropriation	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	TOTAL
Land Acquisition								
Design								
Construction	500 C		500 C	500 C	500 C	500 C	500 C	3,000 C
Other (Specify)								
Total Cost	500 C		500 C	500 C	500 C	500 C	500 C	3,000 C

Fund Source: C = County B = G.O. Bonds F = Federal S = State X = Other L = Lapsed Bond Proceeds P = Park Assessment

Upcountry Master Plan

DISTRICT: Makawao-Pukalani-Kula
PROJECT TYPE: Sewer
DEPARTMENT: Public Works and Environmental Management - Wastewater Division

DESCRIPTION AND JUSTIFICATION:

The County General Plan projects the population in this area to be between 17,000-20,000 in the year 2000. This project develops the master plan to accommodate waterwater flows from this area.

OPERATING IMPACT:

None

ANTICIPATED LIFE: 25 years

Dollars in Thousands

Expenditure Type	Prior Appropriation	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	TOTAL
Land Acquisition								
Design								
Construction								
Other (Specify) STUDY							500 B	500 B
Total Cost							500 B	500 B

Fund Source: C = County B = G.O. Bonds F = Federal S = State X = Other L = Lapsed Bond Proceeds P = Park Assessment

CAPITAL IMPROVEMENT PROGRAM

Alae Tank Replacement

DISTRICT: Makawao-Pukalani-Kula
PROJECT TYPE: Water Supply
DEPARTMENT: Department of Water Supply

DESCRIPTION AND JUSTIFICATION:

Construct 1/2 MG tank at higher elevation to replace existing 2 MG tank. Old tank location was too low in elevation, and old tank was not in use, & in disrepair.

OPERATING IMPACT:

Improve hydraulics in the Kaonoulu Area. Old tank was not in use. New tank at higher elevation.

ANTICIPATED LIFE: 50 years

Dollars in Thousands

Expenditure Type	Prior Appropriation	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	TOTAL
Land Acquisition	50 C							50 C
Design	175 C							175 C
Construction		1,000 C						1,000 C
Other (Specify)								
Total Cost	225 C	1,000 C						1,225 C

Fund Source: C = County B = G.O. Bonds F = Federal S = State X = Other L = Lapsed Bond Proceeds P = Park Assessment

CAPITAL IMPROVEMENT PROGRAM

Burns Place Waterline Improvement

DISTRICT: Makawao-Pukalani-Kula
PROJECT TYPE: Water Supply
DEPARTMENT: Department of Water Supply

DESCRIPTION AND JUSTIFICATION:

Install 1,400' of 8" line and fire hydrants. Relocate service laterals. Replace existing 2" and 3" galvanized and transite lines, improve fire protection. Consider looping burns place line to county garage line.

OPERATING IMPACT:

Improve fire protection and service for Burns Place customers.

ANTICIPATED LIFE: 50 years

Dollars in Thousands

Expenditure Type	Prior Appropriation	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	TOTAL
Land Acquisition								
Design								
Construction			160 C					160 C
Other (Specify)								
Total Cost	0		160 C					160 C

Fund Source: C = County B = G.O. Bonds F = Federal S = State X = Other L = Lapsed Bond Proceeds P = Park Assessment

Chlorination Retrofit for Kamole Tank

DISTRICT: Makawao-Pukalani-Kula
PROJECT TYPE: Water Supply
DEPARTMENT: Department of Water Supply

DESCRIPTION AND JUSTIFICATION:

Renovate chlorination system to accomdate sodium hypochlorite. Eliminate safety problems of chlorine gas. (Halii Maile - Location)

OPERATING IMPACT:

Eliminate safety problems of chlorine gas.

ANTICIPATED LIFE: 35 years

Dollars in Thousands

Expenditure Type	Prior Appropriation	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	TOTAL
Land Acquisition								
Design		35 C						35 C
Construction								
Other (Specify)								
Total Cost		35 C						35 C

Fund Source: C = County B = G.O. Bonds F = Federal S = State X = Other L = Lapsed Bond Proceeds P = Park Assessment

Holomakani Tank Replacement

DISTRICT: Makawao-Pukalani-Kula
PROJECT TYPE: Water Supply
DEPARTMENT: Department of Water Supply

DESCRIPTION AND JUSTIFICATION:

Replace 47,000 gallon corrugated steel tank on Holomakani Road with new, 120,000 gallon tank. Old corrugated steel tank in need of replacement. Received request from field in preparing FY2000 budget. It serves about a hundred lots in growing area. (Pulehuiki-Waiakoa)

OPERATING IMPACT:

Old corrugated steel tank in need of replacement.

ANTICIPATED LIFE: 50 years

Dollars in Thousands

Expenditure Type	Prior Appropriation	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	TOTAL
Land Acquisition								
Design								
Construction				400 C				400 C
Other (Specify)								
Total Cost	0			400 C				400 C

Fund Source: C = County B = G.O. Bonds F = Federal S = State X = Other L = Lapsed Bond Proceeds P = Park Assessment

CAPITAL IMPROVEMENT PROGRAM

Kamaole Lateral Waterline Improvements (Easy Street)

DISTRICT: *Makawao-Pukalani-Kula*
 PROJECT TYPE: *Water Supply*
 DEPARTMENT: *Department of Water Supply*

DESCRIPTION AND JUSTIFICATION:
(Project added by B&F Committee. Not included in original Mayor Budget Proposal.)

OPERATING IMPACT:

ANTICIPATED LIFE:

Dollars in Thousands

Expenditure Type	Prior Appropriation	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	TOTAL
Land Acquisition								
Design								
Construction		55 C						55 C
Other (Specify)								
Total Cost		55 C						55 C

Fund Source: C = County B = G.O. Bonds F = Federal S = State X = Other L = Lapsed Bond Proceeds P = Park Assessment

CAPITAL IMPROVEMENT PROGRAM

Kamaole Tank Replacement

DISTRICT: Makawao-Pukalani-Kula
PROJECT TYPE: Water Supply
DEPARTMENT: Department of Water Supply

DESCRIPTION AND JUSTIFICATION:

Replace 500,000 gallon Kamaole Tank. Old tank in need of replacement. Maintain facilities. (Kamaole-Paeahu - Location)

OPERATING IMPACT:

Reliable, well-maintained storage.

ANTICIPATED LIFE: 50 years

Dollars in Thousands

Expenditure Type	Prior Appropriation	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	TOTAL
Land Acquisition								
Design								
Construction				1,500 C				1,500 C
Other (Specify)								
Total Cost	0			1,500 C				1,500 C

Fund Source: C = County B = G.O. Bonds F = Federal S = State X = Other L = Lapsed Bond Proceeds P = Park Assessment

CAPITAL IMPROVEMENT PROGRAM

Kamaole WWTP Improvements - Clearwell Replacement

DISTRICT: *Makawao-Pukalani-Kula*
 PROJECT TYPE: *Water Supply*
 DEPARTMENT: *Department of Water Supply*

DESCRIPTION AND JUSTIFICATION:
(Project added by B&F Committee. Not included in original Mayor Budget Proposal.)

OPERATING IMPACT:

ANTICIPATED LIFE:

Dollars in Thousands

Expenditure Type	Prior Appropriation	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	TOTAL
Land Acquisition								
Design								
Construction		300 C						300 C
Other (Specify)								
Total Cost		300 C						300 C

Fund Source: C = County B = G.O. Bonds F = Federal S = State X = Other L = Lapsed Bond Proceeds P = Park Assessment

CAPITAL IMPROVEMENT PROGRAM

Kamaole WWTP Improvements - Traveling Screen Replacement

DISTRICT: *Makawao-Pukalani-Kula*
 PROJECT TYPE: *Water Supply*
 DEPARTMENT: *Department of Water Supply*

DESCRIPTION AND JUSTIFICATION:
(Project added by B&F Committee. Not included in original Mayor Budget Proposal.)

OPERATING IMPACT:

ANTICIPATED LIFE:

Dollars in Thousands

Expenditure Type	Prior Appropriation	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	TOTAL
Land Acquisition								
Design								
Construction		180 C						180 C
Other (Specify)								
Total Cost		180 C						180 C

Fund Source: C = County B = G.O. Bonds F = Federal S = State X = Other L = Lapsed Bond Proceeds P = Park Assessment

Kamole WTP Improvements - Acid Cleaning System

DISTRICT: Makawao-Pukalani-Kula
PROJECT TYPE: Water Supply
DEPARTMENT: Department of Water Supply

DESCRIPTION AND JUSTIFICATION:

Install acid cleaning system for microfiltration for Clean-In-Place operations. Improve efficiency of operations, reduce chemical useage and cost, reduce labor costs. With existing clean-in-place system, staff has to switch from caustic to acid cleaning regines, neutralizing solutions in between. Chemicals which could otherwise be reused have to be neutralized and disposed, resulting in high labor and chemical costs. (Halii Maile - Location)

OPERATING IMPACT:

Improve efficiency of operations, reduce chemical useage and costs, reduce labor costs.

ANTICIPATED LIFE: 20 years

Dollars in Thousands

Expenditure Type	Prior Appropriation	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	TOTAL
Land Acquisition								
Design	10 C							10 C
Construction		165 C						165 C
Other (Specify)								
Total Cost	10 C	165 C						175 C

Fund Source: C = County B = G.O. Bonds F = Federal S = State X = Other L = Lapsed Bond Proceeds P = Park Assessment

CAPITAL IMPROVEMENT PROGRAM

Kamole WTP Improvements - Replacement Caustic Tank in Chemical Building

DISTRICT: Makawao-Pukalani-Kula
PROJECT TYPE: Water Supply
DEPARTMENT: Department of Water Supply

DESCRIPTION AND JUSTIFICATION:

Replace Caustic tank in Chemical Building. Existing tank is old and is also too small for current operations. Caustic is used both for indexing and for Clean In Place washing of filters. A larger, newer tank is required to support these functions. Caustic soda is used for CIP Clean In Place washing of filters as well as indexing.

OPERATING IMPACT:

Existing tank is old and is also too small for current operations. Caustic is used both for indexing and for Clean In Place washing of filters. A larger, newer tank is required to support these functions.

ANTICIPATED LIFE: 20 years

Dollars in Thousands

Expenditure Type	Prior Appropriation	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	TOTAL
Land Acquisition								
Design								
Construction		25 C						25 C
Other (Specify)								
Total Cost	0	25 C						25 C

Fund Source: C = County B = G.O. Bonds F = Federal S = State X = Other L = Lapsed Bond Proceeds P = Park Assessment

Kealahou Tank Construction

DISTRICT: Makawao-Pukalani-Kula
PROJECT TYPE: Water Supply
DEPARTMENT: Department of Water Supply

DESCRIPTION AND JUSTIFICATION:

Construction of 300,000 Gallon Tank on Kealahou Lateral to serve Business/Commercial Zoned Area on Lower Kula Road. Maintain adequate storage and pressure break, as well as fire flow. Improve conditions for school and commercial district. 03-13 Several old small tanks on the lateral. 20KGal Redwood tank at 3,290' aka Kealahou is out of service. 30KGal RW tank at 2,921' aka Fernandez replaced w/ 10KGal, 8KGal tank at 3,149' aka UH tank offline. Proposed tank would serve broader function.

OPERATING IMPACT:

Maintain adequate storage and pressure break, as well as fire flow. Improve conditions for school and commercial district.

ANTICIPATED LIFE: 50 years

Dollars in Thousands

Expenditure Type	Prior Appropriation	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	TOTAL
Land Acquisition								
Design	100 C							100 C
Construction			550 C					550 C
Other (Specify)								
Total Cost	100 C		550 C					650 C

Fund Source: C = County B = G.O. Bonds F = Federal S = State X = Other L = Lapsed Bond Proceeds P = Park Assessment

CAPITAL IMPROVEMENT PROGRAM

Keokea Waterline Improvements - Middle Road

DISTRICT: *Makawao-Pukalani-Kula*
 PROJECT TYPE: *Water Supply*
 DEPARTMENT: *Department of Water Supply*

DESCRIPTION AND JUSTIFICATION:
(Project added by B&F Committee. Not included in original Mayor Budget Proposal.)

OPERATING IMPACT:

ANTICIPATED LIFE:

Dollars in Thousands

Expenditure Type	Prior Appropriation	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	TOTAL
Land Acquisition								
Design								
Construction		840 C						840 C
Other (Specify)								
Total Cost		840 C						840 C

Fund Source: C = County B = G.O. Bonds F = Federal S = State X = Other L = Lapsed Bond Proceeds P = Park Assessment

Kula Ag Park - Additional Pumps

DISTRICT: Makawao-Pukalani-Kula
PROJECT TYPE: Water Supply
DEPARTMENT: Department of Water Supply

DESCRIPTION AND JUSTIFICATION:

Add an additional pump each to the Upper and Lower Kula Ag Park pumping facilities.

OPERATING IMPACT:

Improve ability to deliver water.

ANTICIPATED LIFE: 10 years

Dollars in Thousands

Expenditure Type	Prior Appropriation	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	TOTAL
Land Acquisition								
Design		55 C						55 C
Construction			500 C					500 C
Other (Specify)								
Total Cost		55 C	500 C					555 C

Fund Source: C = County B = G.O. Bonds F = Federal S = State X = Other L = Lapsed Bond Proceeds P = Park Assessment

CAPITAL IMPROVEMENT PROGRAM

Lower Kula (Piipholo) Reservoir

DISTRICT: Makawao-Pukalani-Kula
PROJECT TYPE: Water Supply
DEPARTMENT: Department of Water Supply

DESCRIPTION AND JUSTIFICATION:

Design, EIS and construction of large raw water storage reservoir for the Lower Kula System - approximately 300MG depending upon results of design studies. Additional storage needed upcountry to improve source reliability and improve drought preparedness. Estimated 500K EIS, 1,000K Design. Preliminary Siting Study 100K Budget FY99. Preliminary Design Contract NTP 8/12/02 \$368,671 Okahara & Assoc. Additional Funds are Needed.

OPERATING IMPACT:

Additional Storage needed upcountry to improve source reliability and improve drought preparedness.

ANTICIPATED LIFE: 50 years

Dollars in Thousands

Expenditure Type	Prior Appropriation	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	TOTAL
Land Acquisition								
Design	470 C	1,500 C						1,970 C
Construction					30,000 C			30,000 C
Other (Specify) STUDY								
Total Cost	470 C	1,500 C			30,000 C			31,970 C

Fund Source: C = County B = G.O. Bonds F = Federal S = State X = Other L = Lapsed Bond Proceeds P = Park Assessment

CAPITAL IMPROVEMENT PROGRAM

Lower Olinda Waterline Improvements

DISTRICT: *Makawao-Pukalani-Kula*
 PROJECT TYPE: *Water Supply*
 DEPARTMENT: *Department of Water Supply*

DESCRIPTION AND JUSTIFICATION:
(Project added by B&F Committee. Not included in original Mayor Budget Proposal.)

OPERATING IMPACT:

ANTICIPATED LIFE:

Dollars in Thousands

Expenditure Type	Prior Appropriation	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	TOTAL
Land Acquisition								
Design								
Construction		800 C						800 C
Other (Specify)								
Total Cost		800 C						800 C

Fund Source: C = County B = G.O. Bonds F = Federal S = State X = Other L = Lapsed Bond Proceeds P = Park Assessment

Maluhia Tank Replacement

DISTRICT: Makawao-Pukalani-Kula
PROJECT TYPE: Water Supply
DEPARTMENT: Department of Water Supply

DESCRIPTION AND JUSTIFICATION:

Replace 0.5 MG Maluhia Tank with 1 MG Tank, controls, and site appurtenances. Tank in need of repair or replacement per items in sanitary survey. Per sanitary survey, tank is severely rusted. Domed vent screen has rusted through. Hatch in roof is rusty. Roof opening allows access for small diameter pipes of various materials & unknown uses. Access ladder hazard. Valve vaults in poor condition.

OPERATING IMPACT:

Maintain facilities. Support reliability and safety.

ANTICIPATED LIFE: 50 years

Dollars in Thousands

Expenditure Type	Prior Appropriation	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	TOTAL
Land Acquisition								
Design								
Construction					2,000 C			2,000 C
Other (Specify)								
Total Cost					2,000 C			2,000 C

Fund Source: C = County B = G.O. Bonds F = Federal S = State X = Other L = Lapsed Bond Proceeds P = Park Assessment

CAPITAL IMPROVEMENT PROGRAM

Pulehuiki Tank Replacement - (Hapapa Road)

DISTRICT: Makawao-Pukalani-Kula
PROJECT TYPE: Water Supply
DEPARTMENT: Department of Water Supply

DESCRIPTION AND JUSTIFICATION:

Replace tank on Hapapa Road with new, 100,000 gallon tank. Existing tank is old and in need of replacement. Existing tank is deteriorated and in need of replacement. Maintain facilities, service and water quality for Upcountry customers. Design 00-19. 01-18.

OPERATING IMPACT:

Maintain system facilities. Improve water service for Pulehuiki-Waiakoa customers.

ANTICIPATED LIFE: 50 years

Dollars in Thousands

Expenditure Type	Prior Appropriation	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	TOTAL
Land Acquisition								
Design	150 C							150 C
Construction		150 C						150 C
Other (Specify)								
Total Cost	150 C	150 C						300 C

Fund Source: C = County B = G.O. Bonds F = Federal S = State X = Other L = Lapsed Bond Proceeds P = Park Assessment

Replacement of Kamole # 4 Pump # 522

DISTRICT: Makawao-Pukalani-Kula
PROJECT TYPE: Water Supply
DEPARTMENT: Department of Water Supply

DESCRIPTION AND JUSTIFICATION:

Replace pump. Improve reliability

OPERATING IMPACT:

Improve reliability

ANTICIPATED LIFE: 10 years

Dollars in Thousands

Expenditure Type	Prior Appropriation	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	TOTAL
Land Acquisition								
Design								
Construction		70 C						70 C
Other (Specify)								
Total Cost		70 C						70 C

Fund Source: C = County B = G.O. Bonds F = Federal S = State X = Other L = Lapsed Bond Proceeds P = Park Assessment

Replacement of Kula Ag Park Booster Pump # 587

DISTRICT: Makawao-Pukalani-Kula
PROJECT TYPE: Water Supply
DEPARTMENT: Department of Water Supply

DESCRIPTION AND JUSTIFICATION:

Replace pump. Improve reliability

OPERATING IMPACT:

Improve reliability

ANTICIPATED LIFE: 10 years

Dollars in Thousands

Expenditure Type	Prior Appropriation	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	TOTAL
Land Acquisition								
Design								
Construction								
Other (Specify) REPAIR/REPLACE/ REFURBISH		60 C						60 C
Total Cost		60 C						60 C

Fund Source: C = County B = G.O. Bonds F = Federal S = State X = Other L = Lapsed Bond Proceeds P = Park Assessment

Replacement of Maluhia Pump # 533

DISTRICT: Makawao-Pukalani-Kula
PROJECT TYPE: Water Supply
DEPARTMENT: Department of Water Supply

DESCRIPTION AND JUSTIFICATION:

Replace pump. Improve reliability

OPERATING IMPACT:

Improve reliability

ANTICIPATED LIFE: 10 years

Dollars in Thousands

Expenditure Type	Prior Appropriation	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	TOTAL
Land Acquisition								
Design								
Construction		60 C						60 C
Other (Specify)								
Total Cost		60 C						60 C

Fund Source: C = County B = G.O. Bonds F = Federal S = State X = Other L = Lapsed Bond Proceeds P = Park Assessment

CAPITAL IMPROVEMENT PROGRAM

Upcountry Source Development - Pookela Well Station - Development & Connection to System

DISTRICT: Makawao-Pukalani-Kula
PROJECT TYPE: Water Supply
DEPARTMENT: Department of Water Supply

DESCRIPTION AND JUSTIFICATION:

Develop wells to serve upcountry system. Design Contract - Fukunaga & Assoc. \$66,540. Exploratory well construction Water Resources International \$1,011,675. NTP 7/8/02, antic 1400 gpm pumps.

OPERATING IMPACT:

Improve reliability and availability of water upcountry

ANTICIPATED LIFE: 50 years

Dollars in Thousands

Expenditure Type	Prior Appropriation	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	TOTAL
Land Acquisition								
Design	150 C							150 C
Construction	1,079 C	900 C						1,979 C
Other (Specify)								
Total Cost	1,229 C	900 C						2,129 C

Fund Source: C = County B = G.O. Bonds F = Federal S = State X = Other L = Lapsed Bond Proceeds P = Park Assessment

Waikamoi Flume Repairs & Maintenance

DISTRICT: Makawao-Pukalani-Kula
PROJECT TYPE: Water Supply
DEPARTMENT: Department of Water Supply

DESCRIPTION AND JUSTIFICATION:

Repair Flume and Intakes on Upper Kula Line. Improve reliability of source for upcountry area, minimize water losses. Old wooden flume in forest reserve. Regular maintenance requires. Two of seven trestles done as of end FY01. Repairs only during 2002. Project ongoing.

OPERATING IMPACT:

Improve reliability of source for the upcountry area, minimize water losses.

ANTICIPATED LIFE: 20 years

Dollars in Thousands

Expenditure Type	Prior Appropriation	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	TOTAL
Land Acquisition								
Design								
Construction	50 C	50 C	50 C	50 C	50 C	50 C	50 C	350 C
Other (Specify)								
Total Cost	50 C	50 C	50 C	50 C	50 C	50 C	50 C	350 C

Fund Source: C = County B = G.O. Bonds F = Federal S = State X = Other L = Lapsed Bond Proceeds P = Park Assessment